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Datasheet for ABIN7535462  
**SEMA3G Protein (His tag)**

### Overview

Quantity:	100 µg
Target:	SEMA3G
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SEMA3G protein is labelled with His tag.

### Product Details

Purpose:	Recombinant Human Semaphorin-3G/SEMA3G Protein
Sequence:	MAPSAWAICW LLGGLLLHGG SSGPSPGPSV PRLRLSYRDL LSANRSAIFL GPQGSNLNQA MYLDEYRDRL FLGGLDALYS LRLDQAWPDP REVLWPPQPG QREECVRKGR DPLTECANFV RVLQPHNRTH LLACGTGAFQ PTCALITVGH RGEHVLHLEP GSVESGRGRC PHEPSRPFAS TFIDGELYTG LTADFLGREA MIFRSGGPRP ALRSDSDQSL LHDPRFVMAA RIPENSDQDN DKVYFFFSET VPSPDGGSNH VTVSRVGRVC VNDAGGQRVL VNKWSTFLKA RLVCVPGPG GAETHFDQLE DVFLLWPKAG KSLEVYALFS TVSAVFQGFA VCVYHMADIW EVFNGPFAHR DGPQHQWGPY GGKVPFPRPG VCPSKMTAQP GRPFGSTKDY PDEVLQFARA HPLMFWPVPR RHGRPVLVKT HLAQQLHQIV VDRVEAEDGT YDVIPLGTDS GSVLKVIALQ AGGSAEPEEV VLEELQVFKV PTPITEMEIS VKRQMLYVGS RLGVAQLRLH QCETYGTACA ECCLARDPYC AWDGASCTHY RPSLGKRRFR RQDIRHGMPA LQCLGQSQEE EAVGLVAATM VYGTEHNSTF LECLPKSPQA AVRWLLQRPQ DEGPDQVKTD ERVLHTEGRL LFRRLSRFDA GTYTCTTLEH GFSQTVVRLA LVVIVASQLD NLFPPPEPKPE EPPARGGLAS TPPKAWYKDI LQLIGFANLP RVDEYCERVW CRGTTECSGC FRSRSRGKQA RGKSWAGLEL GKKMKSRVHA EHNRTPREVE AT

## Product Details

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Specificity:	Met1-Thr782
Purity:	> 90 % by SDS-PAGE.
Sterility:	0.22 µm filtered

## Target Details

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Target:	SEMA3G
Alternative Name:	Semaphorin-3G/SEMA3G ( <a href="#">SEMA3G Products</a> )

**Background:** Description: Semaphorin 3G (Sema3G), also known as Semaphorin sem2, is a class 3 member of the semaphorin family initially identified as regulators of neuron-axonal guidance. More than 30 semaphorins have been discovered and are divided into eight classes: classes 1 and 4-7 are membrane-associated, while classes 2, 3, and 8 are in a secreted form. In vitro analysis shows Sema 3G binds to Neuropilin-2, which forms a receptor complex with Plexin-D1. Via this pathways Sema 3G controls lymphatic vascular patterning by the means of cellular collapse. It shows protective effects in ischemic retinopathies by coordinating interactions of beta -catenin and VE-Cadherin in endothelium. Sema 3G has been shown to be involved in adipocyte differentiation. Knockdown of Sema3G inhibited weight gain through PI3K/Akt/GSK3 beta signaling in the adipose tissue and the AMPK/SREBP-1c pathway in the liver. Thus, Sema 3G is an adipokine essential for adipogenesis, lipogenesis, and insulin resistance and is associated with obesity.

Name: SEMA3G,sem2

Gene ID: 56920

UniProt: [Q9NS98](#)

## Application Details

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Restrictions: For Research Use only

## Handling

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Format: Lyophilized

**Reconstitution:** Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Handling

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Buffer:	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.
Storage:	-20 °C,-80 °C
Storage Comment:	Store the lyophilized protein at -20°C to -80°C for long term. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.